

2004

# Water Quality Report

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# Your Drinking Water in 2003

In 2003, your drinking water met or surpassed all federal and state drinking water standards. Scottsdale water is extensively tested for over 100 substances the Environmental Protection Agency (EPA) has determined may be unhealthy to humans if consumed over extended periods of time above the health standards. Health standards are set to detect and/or eliminate unwanted substances long before they pose a health threat.

The United States Environmental Protection Agency (EPA), the Arizona Department of Environmental Quality (ADEQ), and the Maricopa County Environmental Services Department requires public water systems to fund, prepare and distribute an annual report about the quality of the water. The Water Quality Report provides valuable information about where your drinking water comes from, how it is treated, and summarizes the most recent analytical tests completed. This report also contains important information on groundwater recharge, drought planning and water conservation.

To ensure your tap water is safe to drink, the EPA issues regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for substances in commercial bottled water.

Sources of drinking water include rivers, lakes, reservoirs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive materials, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-416-4791).

#### Where Your Water Comes From

Your water comes from both surface water and groundwater sources. Throughout the year you may receive water from any of these sources, or a combination of water sources. Consumer demand, weather and the time of year are all factors that can influence where your water supply originates.

The city's main surface water supply is from the Colorado River. This water is transported through the Central Arizona Project (CAP) aqueduct to the Scottsdale CAP Water Treatment Plant where it is treated to drinking water standards before being served to customers.

Scottsdale also receives surface water from the Salt River Project (SRP), which originates from the Verde and Salt Rivers. Under contract with the City of Phoenix, Scottsdale's SRP supply is treated to drinking water standards and is piped to Scottsdale where it is served to customers.

Besides these surface water sources, Scottsdale water comes from a groundwater aquifer stored deep below ground. The water is pumped from the ground through one of the city's thirty-seven wells and disinfected prior to entering the distribution system.

**Attention Immuno-Compromised Citizens** Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy; persons who have undergone organ transplants; people with HIV/AIDS or other immune system disorders; and some elderly people and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency / Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

# Treating the Water to Drinking Water Quality

# **CAP Water Treatment Plant**

Water from the Colorado River is treated to drinking water standards at the city's CAP Water Treatment Plant and then delivered to Scottsdale citizens.

#### Pre-treatment

In large basins, the water is treated with activated carbon to control unpleasant tastes and odors.

#### Coagulation/Flocculation

Large mixers called flocculators and an additive called "alum" are used to draw small particles together to form larger heavier particles.

#### Sedimentation

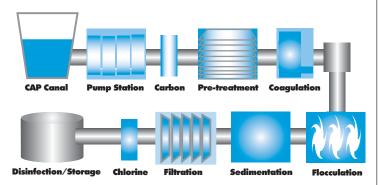
The water is moved to large rectangular basins where the large particles settle to the bottom of the basins where they are removed.

#### Filtration

Very small particles that remain in the water are removed by a filtering process.

#### Disinfection

The final step is disinfection with chlorine. Water carrying a slight chlorine residual is distributed to water customers. A chlorine residual is required by regulation to ensure adequate destruction of harmful microbes before the water is distributed to customers.



City of Scottsdale Central Arizona Project (CAP) Water Treatment Plant

# **Central Groundwater Treatment Facility (CGTF)**

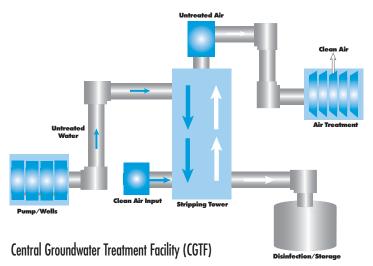
The North Indian Bend Wash (NIBW) Central Groundwater Treatment Facility (CGTF) treats water pumped from four groundwater wells that contain trichloroethylene (TCE), an industrial chemical. The CGTF facility located at Pima and Thomas Roads was built by private companies deemed potentially responsible for contaminating the groundwater with TCE. The private companies are responsible for the cost of operating and maintaining the facility. The facility pumps groundwater from

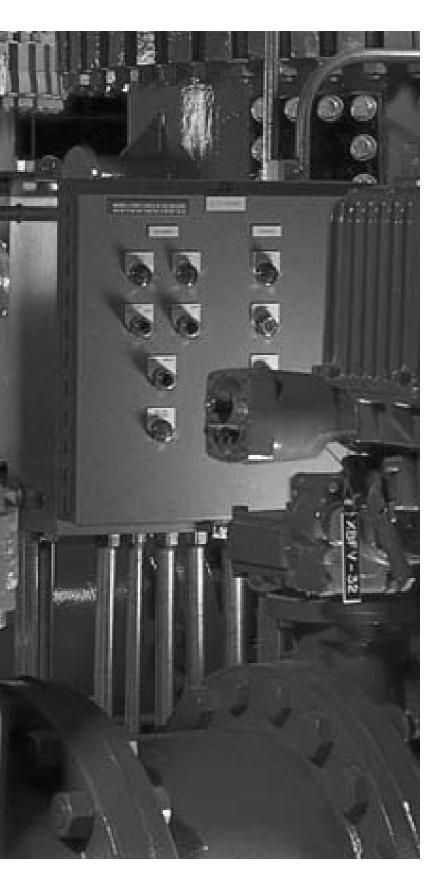
an area designated by EPA as the NIBW Superfund site. The ground-water is treated to federal and state drinking water standards, with regulatory oversight by EPA, Arizona Department of Environmental Quality, and Maricopa County. In 2003, the facility continued to remove TCE from the water to a non-detect level (less than 0.5 part per billion, which is far below the MCL of 5 ppb).

For more information on the NIBW Superfund site, please call EPA's message line (800-231-3075). For more information on the NIBW Central Groundwater Treatment Facility, please contact the City of Scottsdale at (480) 312-8732 or visit our water quality website at www.scottsdaleaz.gov/water/quality.

# How does the NIBW Central Groundwater Treatment Facility work?

- Water pumped from the four wells flows down through three treatment columns.
- The treatment facility uses a process that "strips" the water of contaminants by mixing the water with air. As the water and air mix, the contaminants attach themselves to the air.
- The air used in the treatment process is passed through activated carbon filters to remove the contaminants before the air is released.
- The treated water is then moved to a reservoir for disinfection before it is delivered to the City of Scottsdale drinking water system.
   The water in the reservoir is combined with other treated water source(s) to meet customer demand.





# **Important Definitions**

#### Contaminant

Any physical, chemical, biological, or radiological substance or matter in the water.

#### Maximum Contaminant Level Goal (MCLG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

#### Maximum Contaminant Level (MCL)

The highest level of a contaminant allowed in drinking water. MCLs are set by the EPA as close to MCLGs as feasible using the best available treatment technology.

#### Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

#### Action Level (AL)

The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

#### Part per million (ppm) / Part per billion (ppb)

These units describe the levels of detected substances. One part per million can be described as one penny in a million nickels. One part per billion is one penny in a billion nickels.

#### Picocuries per liter(pCi/L)

A measure of the radioactivity of a substance.

#### Health Based Guidance Level (HBGL)

A non-enforceable limit developed by Arizona Department of Health Services (ADHS). They represent levels that are unlikey to result in adverse health affects with long-term exposure to humans.

#### GPM

Gallon per minute

# Contaminants that may be present in source water include:

- Microbial Contaminants including viruses, bacteria or parasites (such as Cryptosporidium or Giardia), which may come from agricultural or livestock operations and wildlife.
- Inorganic contaminants such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, storm water runoff and residential uses.
- Organic chemical contaminants including synthetic and volatile organic compounds, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radiochemical contaminants which occur naturally or result from oil and gas production and mining activities.

#### 2003 DETECTED RESULTS

The results of Scottsdale's water quality analysis are contained in the tables on the following pages. The water service areas are divided into two different zones; CGTF Area and CAP Area. Use the map to determine which area you receive your water from and refer to the tables for your water quality results. Scottsdale water is tested for over 100 substances, however, only the substances that are detected in the water are listed in this report. A complete list of all substances that the city monitors is available upon request.

# **2003 Inorganics**

				CAP AREA	CGTF AREA	
SUBSTANCE	UNIT	MCL	MCLG	RANGE	RANGE	LIKELY
Arsenic*	ppb	50	NA	ND - 29	6 - 9	Natur
Barium	ppb	2000	2000	ND - 291	34 - 41	Natur
Chromium	ppb	100	100	ND - 66	ND	Natur
Fluoride	ppm	4	4	0.3 - 1.6	0.4 - 0.5	Natur
Nitrate (as N)**	ppm	10	10	ND - 6	ND - 6	Run o

LIKELY SOURCE IN DRINKING WATER

Naturally occurring in soil Naturally occurring in soil Naturally occurring in soil Naturally occurring in soil

Run off from fertilizer use; Leaching from septic tanks

\*\* Nitrate is an inorganic substance that is monitored due to run off from fertilizer use. Nitrate in drinking water at levels greater than 10 ppm is a health risk for infants of less than six months of age. In 2003, the highest nitrate level detected in Scottsdale water was 6 ppm. High nitrate levels above 10 ppm in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time due to rainfall or agricultural activity. If you are caring for an infant you should seek advice from your health care provider.

# **2003 Organics**

				CAP AREA		CGTF AF	REA
SUBSTANCE Bromodichloromethane Bromoform Chloroform Dibromochloromethane	UNIT ppb ppb ppb ppb	MCL NA NA NA	MCLG NA NA NA	AVERAGE 2.1 1.7 1.9 2.9	RANGE ND - 20.7 ND - 8.95 ND - 14.2 ND - 23.1	AVERAGE 11.5 4.1 12.7 9.4	RANGE ND - 40 0.52 - 6.98 0.78 - 34.6 1 - 31.4
Xylenes, Total Dalapon	ppb ppb	10,000 200	NA NA	0.03 ND	ND - 0.7 ND	ND 0.34	ND ND - 1.7

# LIKELY SOURCE IN DRINKING WATER

By-product of drinking water chlorination Discharge from petroleum or chemical factories Runoff from herbicide used on rights-of-ways

# CAP Area supplied by CAP Water Treatment Plant and supplemented by groundwater wells

CAP Area

CGTF Area supplied by treated groundwater from CGTF & supplemented SRP surface water treated by the City of Phoenix

#### Key

ND = non-detectable NA = non-applicable (the substance was analyzed but not detected)

# **2003 Radiochemicals**

				CAP AREA		CAP AREA*		CGTF AREA*	
Substance	Unit	MCL	MCLG	RANGE HIGHEST AVG.		RANGE HIGHEST AVG.	LIKELY SOURCE IN DRINKING WATER		
Gross Alpha	pCi/L	15	0	ND - 3.6 2.1		ND - 4.9 ND	Naturally occurring in soil		
Radium 226	pCi/L	5	0	ND - 0.2 0.5		ND - 0.7 2.4	Naturally occurring in soil		
Radium 228	pCi/L	5	0	ND ND		ND - 1.0 1.0	Naturally occurring in soil		
Uranium	ppb	30	0	ND - 5.22 2.8		ND - 10.7 6.0	Naturally occurring in soil		

<sup>\*</sup> Results are from 2002. All other data is from the most recent testing done in accordance with the regulations.

<sup>\*</sup> Arsenic is a naturally occurring mineral commonly found in water due to erosion from rocks and soil. Some people who drink water containing arsenic in excess of the arsenic standard or Maximum Contaminant Level over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.



# **2003 Detected Secondary Standards**

Secondary inorganic substances do not have an MCL and are measured voluntarily because these substances primarily relate to the taste, odor, or appearance of drinking water. These inorganic substances are found naturally in the soil.

# **2003 Secondary Inorganics**

				CAD ADEA	COTE ADEA
SUBSTANCE	Unit	MCL	MCLG	CAP AREA RANGE	CGTF AREA RANGE
000011111111	UNII				
Alkalinity	ppm	NA	NA	114 - 240	168 - 230
Calcium	ppm	NA	NA	13.2 - 71.4	47.0 - 60.8
Chloride	ppm	NA	NA	19 - 206	43 - 284
Hardness, Total	ppm -	NA	NA	92.3 - 280	265 - 392
	grains/gallon			5.4 - 16.4	15.5 - 22.9
Iron	ppm	NA	NA	ND - 0.724	ND - 0.139
Magnesium	ppm	NA	NA	10.5 - 28.2	35.8 - 58.3
рН	Std. Unit	NA	NA	6.89 - 8.60	7.1 - 8.36
Sodium	ppm	NA	NA	39 - 158	53 - 127
Sulfate	ppm	NA	NA	ND - 240	82 - 99
Temperature	٥( -	NA	NA	12.6 - 39.5	13.9 - 34.6
	0F	NA	NA	54.6 - 103.1	57.0 - 94.3
Total Dissolved Solids	ppm	NA	NA	230 - 630	400 - 780
Zinc	ppm	NA	NA	ND - 0.039	0.012 - 0.021

# 2003 Turbidity Results after Treatment at the CAP Water Treatment Plant

Turbidity is a measure of clarity in the water and is reported as Nephelometric Turbidity Units (NTU). It is caused by suspended matter such as organic and inorganic matter, silt, algae or tiny microorganisms. Turbidity is a good indicator of the effectiveness of the water treatment process. A treatment technique standard applies instead of an MCL. In accordance with the Interim Enhanced Surface Water Treatment Rule (IESWTR) the city has collected continuous turbidity samples from individual filters at the water treatment plant. All samples collected were in compliance with the regulation.

TREATMENT TECHNIQUE SUBSTANCE No turbidity measure- NA **Turbidity** ment can be above 1 NTU at any time. At least 95% of turbidity measurements of any month must be less than or equal to 0.3 NTU.

MCLG

HIGHEST MEASUREMENT LOWEST MONTHLY PERCENTAGE 100 % of monthly samples 0.20 met treatment technique requirements

LIKELY SOURCE IN DRINKING WATER Soil runoff

# 2003 Results of Samples Collected in the Distribution System

Microbial, Disinfection Residual and Disinfection Byproduct samples are collected throughout the city at dedicated sampling stations. These distribution system samples are representative of water delivered to homes and businesses.

Drinking water is treated with chlorine to ensure adequate microbial disinfection. Every month throughout the city over 150 samples are collected to ensure adequate disinfection and verify the absence of microbes within the distribution system pipes. Scottsdale's goal is to have a chlorine

residual between 0.8 ppm and 1.2 ppm in all monthly samples. When chlorine residuals are outside the preferred range, the city makes necessary adjustments to return the residual to the preferred range.

Disinfectant Byproducts are formed as a result of a chemical reaction between chlorine and naturally occurring organic matter in the water. The disinfection process is carefully controlled so that disinfection is effective, while keeping levels of disinfection byproducts as low as possible.

# **2003 Microbial Monitoring**

# 2003 Disinfectant Byproduct Monitoring

SUBSTANCE Total Trihalomethanes	<b>U</b> NIT ppb	1	MCLG 0	CAP AREA HIGHEST ANNUAL AVG. 62	RANGE ND - 94	CGTF AREA HIGHEST ANNUAL AVG. 79	range 7 - 92	LIKELY SOURCE IN DRINKING WATER Byproduct of drinking water chlorination
Haloacetic Acids	ppb	60	NA	20	ND - 35	24	ND - 34	Byproduct of drinking water chlorination

The MCL is based on a system wide annual running average. Based on the annual running average, the City was below the MCL.

# Results of Lead and Copper Monitoring in Residential Households

Lead and copper are used to make household plumbing fixtures and pipes. Lead and copper may leach from faucets or plumbing components into water when the water stands in pipes for several hours or more. Leaching may also occur in copper pipes joined with lead-based solder. Because the water in your pipes can pick up these metals, installation of lead solder, pipes and fittings was banned in 1986. The 2002 lead and copper levels reported are from water faucets inside 52 Scottsdale homes that were built before the lead ban.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. Lead levels at your home may be higher than other homes as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels you may want to have your water tested. If you have elevated levels of lead in your home, run your faucet when the water has not been used for more than six hours and use only cold water for consumption. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).





# Results of Lead and Copper Monitoring in Residential Households

Substance Lead	Unit ppb	ACTION LEVEL (AL) 90% of homes tested must have lead levels less than 15 ppb	MCLG 0	AMOUNT DETECTED 90% of the homes tested had lead levels less than 2 ppb	LIKELY SOURCE IN DRINKING WATER Corrosion of household plumbing
Lead - from city water sources	ppb	NA	NA	4.3	Naturally occuring in soil
Copper	ppm	90% of homes tested must have copper levels less than 1.3 ppm	1.3	90% of the homes tested had copper levels less than 0.23 ppm	Corrosion of household plumbing
Copper - from city water sources	ppm	NA	NA	ND-0.026	Naturally occuring in soil

# **Results of Unregulated Contaminant Monitoring**

The City is required to monitor for List 1 Contaminants under the Unregulated Contaminant Monitoring Rule (UCMR) during one calendar year between 2001 and 2003. List 1 consists of 12 chemical contaminants, which the City monitored in 2002. The data generated by the UCMR will be used to evaluate and prioritize contaminants on the Drinking Water Contaminant Candidate List, a list of contaminants the EPA is considering for possible new drinking water standards.

SUBSTANCE Perchlorate 2,4-dinitrotoluene	UNIT ppb ppb	MCL NA NA	<b>MCLG</b> NA NA	CAP AREA ND - 6.9 ND	CGTF AREA ND ND
2,6-dinitrotoluene Acetochlor	ppb ppb	NA Na	NA Na	ND ND	ND ND
DCPA mono-acid degredate	ppb	NA	NA	ND	ND
DCPA di-acid degradate	ppb	NA NA	NA	ND	ND ND
4,4'- DDE EPTC	ppb ppb	NA Na	NA Na	ND ND	ND
Molinate	ppb	NA	NA	ND	ND
MTBE	ppb	NA	NA	ND	ND
Nitrobenzene	ppb	NA NA	NA	ND	ND
Terbacil	ppb	NA	NA	ND	ND

#### **Perchlorate**

Perchlorate is a man-made inorganic salt, which is used as a component of solid rocket fuel munitions and in the pyrotechnics fireworks industry. To date, EPA has not set any health limit. Arizona has a Health Based Guidance Level (HBGL) of 14 ppb. The EPA is not currently requiring perchlorate monitoring in drinking water. However, Scottsdale has been monitoring for perchlorate in the CAP surface water supply because of detections in Lake Mead, which flows to the Colorado River.

During voluntary monitoring conducted in 2003 sample results for the Scottsdale CAP water supply range from non-detectable to 6.2 ppb.

EPA risk studies will determine if there may be an impact to the environment or human health from low concentration perchlorate levels in water. Additional information about perchlorate can be obtained from the EPA Safe Drinking Water Hotline. (800-426-4791).

# MTBE (methyl-t-butyl ether)

MTBE is a member of a group of volatile organic chemicals commonly known as fuel oxygenates. Oxygenates are added to fuel to increase its oxygen content. MTBE is used in gasoline throughout the United States to reduce carbon monoxide and ozone levels caused by auto emissions.

The EPA is not currently requiring MTBE monitoring in drinking water. In the interim EPA has recommended that MTBE concentration not exceed 20-40 ppb. During the UCMR monitoring conducted in 2002, Scottsdale tested MTBE at all drinking water sources. There has been no detectable MTBE in drinking water served to Scottsdale customers. Additional information about MTBE can be obtained from the EPA Safe Drinking Water Hotline. (800-426-4791)

# **Source Water Protection Program (SWAP)**

The 1996 Safe Drinking Water Act Amendments directed states to assess drinking water supplies and to identify potential threats to water quality. The assessments include identifying water sources, inventorying nearby land uses, and determining whether a supply might be susceptible to contamination. Arizona Department of Environmental Quality (ADEQ) is currently completing source water assessments for Arizona water systems. ADEQ's work will include a review of Lake Pleasant and groundwater supplies, both major supplies for the City. For more information on ADEQ's upcoming assessments, please contact the ADEQ Source Water Protection Program at 1-800-234-5677, extension 771-4561.

In 2003, the City had completed a survey on its groundwater supplies and on those portions of the SRP and CAP canals upstream of the City's treatment facilities. The report was shared with ADEQ and is under review. For further information on the City's source water survey, please call 480-312-8732.

# **Upcoming Drinking Water Regulations**

#### Arsenic

Presently the arsenic standard is set at 50 ppb. While the City of Scottsdale's drinking water contains low levels of arsenic, it fully complies with EPA's standard for arsenic. In 2001,the EPA lowered the arsenic standard from 50 ppb to 10 ppb, with an effective date of January 2006. In preparation for the compliance date, Scottsdale has initiated the construction of a series of arsenic treatment facilities that will be designed to remove this naturally occurring element from the city's drinking water wells. The City will be in full compliance with the new MCL of 10 ppb by January 2006.

#### Radon

Radon is a naturally occurring radioactive gas that people cannot see, taste or smell. Breathing elevated levels of radon in indoor air has been linked to lung cancer. Radon is released to the air from the soil and can migrate into a building through the foundation. Radon can also be released into the air from tap water. However, it is estimated that less than two percent of radon in the air comes from drinking water.

Preparing for a pending regulation, Scottsdale's Water Resources Department staff began collecting radon samples from wells and treatment plants. This monitoring was conducted in 1999 through 2000. Sample results varied depending on the water source, ranging from non-detect to 1,110 picocuries per liter (pCi/L). The state has the option to adopt a program to address the health risks from radon in indoor air with a proposed alternate drinking water standard of 4,000 pCi/L. Additional monitoring will occur once the rule is finalized.

If you are concerned about radon in your home or office, test the air in the building. Testing is inexpensive and easy, and there are simple ways to fix a radon problem that are not too costly. For additional information, call EPA's Radon Hotline (800-SOS-RADON).

#### Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Ingestion of Cryptosporidium may cause cryptosporidiosis, an gastrointestinal illness. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. In preparation for the upcoming Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), Scottsdale has begun frequent sampling for Cryptosporidium. The City has detected Cryptosporidium in only one of the numerous source water samples taken. The City's stringent treatment process is designed to remove the microbial organism in the finished water.



# GONSERVATION

# **Water Conservation Programs**

The City has a four-person water conservation staff. Many services are offered, including residential and commercial site visits.

The Water Conservation staff provides water education activities at school science fairs and distributes educational materials to classrooms. Presentations are given at special events and to specialty groups. Topics include both indoor and outdoor water management practices.

The City sponsors low-water-use landscape workshops. The workshops are designed primarily for homeowners and cover topics such as landscape design, plant selection, planting techniques, landscape maintenance, and water efficient irrigation.

City rebate programs encourage installation of water efficient plumbing fixtures and/or Xeriscape landscape. A water user can receive up to a \$500 rebate for installing or converting to a Xeriscape design using desert adapted plants and/or a \$50 rebate for installing an automatic irrigation controller.

The plumbing rebate is \$75 per each high-water-use toilet exchanged for a 1.6 gpm toilet and \$5 for the installation of low flow showerheads (up to two toilets and/or showerheads per residential property) in homes built before January 1992.

A variety of free publications are also available that promote water efficient landscape and other water saving techniques. Water Conservation promotes and distributes brochures on low-water-use landscaping to Scottsdale's citizens. Water Conservation created the Crescordia award winning booklet Landscape Watering by the Numbers which helps citizens figure out how to water their yard in the most efficient manor. Other popular brochures include Landscape Plants for the Arizona Desert - Guide to growing more than 200 Low-Water-Use Plants, and Xeriscape - Landscaping With Style In The Arizona Desert.

For more information about rebates, workshops, publications, and other City water conservation programs, contact the City's water conservation office at 480-312-5650.

# **City Departments Save Water**

The City's Parks, Recreation and Facilities Division, the largest City water user, is responsible for maintenance and irrigation of over 300 acres of turf, and over 3 million square feet of medians and rights of way. Through implementation of various innovative irrigation control technologies, Parks reduced its water use

by a little over 7% (40.5 million gallons of water) throughout its turf facilities in 2002. In 2003, Parks reduced its water use by an additional 6 percent over 2002's reductions.

More than 400 high-water use toilets in City buildings are being replaced with low flow fixtures. Replacing the toilets will save at least one quarter million gallons of water a year. Our citizens are also doing their part.

# **Water Conservation Tips**

The following are just a few tips that can help you do your part to live a more water-wise lifestyle.

- Turn off the water while brushing your teeth and save 4 gallons a minute. That's 200 gallons a week for a family of four.
- Time your shower to keep it under 5 minutes. You'll save up to 1000 gallons a month.
- When washing dishes by hand, use the least amount of detergent possible. This minimizes the amount of water you need to rinse.
- Run your washing machine and dishwasher only when they are full and you could save 1000 gallons a month.
- When washing the car, use soap and water from a bucket. Use a hose with a shut-off nozzle for the final rinse.
- Use a broom when cleaning your driveway.
- Put a layer of mulch around trees and plants. Bark chips, straw, gravel and even leaf droppings from your trees will slow down evaporation.
- Don't water the lawn on windy days. There is too much evaporation.
- For landscaping, use low water use plants for year-round landscape and save up to 550 gallons each year.

# Water-Use It Wisely

The City of Scottsdale's Water Conservation Department is an active participant in the "Water- Use It Wisely" advertising campaign with other valley cities. The campaign promotes easy things citizens can do to save water. This campaign has achieved wide recognition in the valley. The water conservation office has worked to promote this campaign by sponsoring and/or distributing items such as: television commercials, watering guide

books, brochures (Spanish and English), garbage truck signs, bookmarkers, magnets and by staffing special events booths promoting the campaign.

For more information on Water Use It Wisely, go to www.wateruseitwisely.com

# Tap Into Quality

The safety, convenience and affordability of tap water is the message being communicated by "Tap Into Quality," a public education campaign designed to keep citizens informed about the quality of their tap water. Valley Cities, Central Arizona Project (CAP) and Salt River Project (SRP) have teamed with Arizona Water & Pollution Control Association to educate citizens about their tap water. For more information on Tap Into Quality, go to www.tapintoquality.com

# **Groundwater Recharge**

Scottsdale is a leader in the Phoenix area in the protection of our groundwater through artificial groundwater recharge. The city is replenishing our ground water supply by replacing or recharging water at our Water Campus facility in North Scottsdale. In 2003, this ground water recharge added over 2 billion gallons of water to our underground aquifers. Water stored in these aquifers is an important part of Scottsdale's overall water supply.

Scottsdale is also starting to implement groundwater recharge/recovery throughout the city by injecting treated CAP water directly into the aquifer through specially designed wells. These wells will be used to recharge during periods of low water use, typically during the winter months, and will supplement the water supply during the high demand summer months.

The groundwater aquifer crosses City boundaries. Therefore, Scottsdale staff began a project to work together with the City of Phoenix to plan for future sustainability of this shared resource. This "aquifer management plan" project will lead to a joint strategy to manage withdrawals and recharge in the area north of the CAP canal.

# **Drought Planning**

The continued dry conditions on both the SRP and the CAP watersheds could have an impact on Scottsdale's water supplies. In July 2003, the Scottsdale City Council adopted a Drought Management Plan so that we had a way to respond to drought should more severe shortages occur.

There are four increasingly restrictive stages in the Drought Management Plan. Each stage contains more stringent water use reduction measures and outlines ways to achieve these measures. Declaration of drought at any stage will initiate an intensive public education and information program to advise and educate customers impacted by the water shortage and the need for possible drought measures.

Scottsdale has enough water supplies available to meet our customers needs due to the wise water planning that has been done in Arizona. We have not needed to institute mandatory water use restrictions, and do not anticipate the need to do so, however Scottsdale continues to promote voluntary conservation year round. City staff continually monitor the situation to insure that we are prepared.

# **Valley Forward Award**

Valley Forward Association is a unique public interest organization that has influenced quality of life and environmental decisions in the Valley of the Sun since 1969. Valley Forward brings business, community and civic leaders together to convene thoughtful public dialogue on regional issues and to promote cooperative efforts to improve the environment and quality of life in the Valley.

Each year Valley Forward publishes "Making the Grade: The Valley's Environmental Report Card." City of Scottsdale received an "A" in the Water section of the report card, stating that "Scottsdale can be used as a model for solid and comprehensive water resource planning. Its education program offers materials for all ages and incorporates rebate programs for low water use fixtures. The City's Water Campus makes good use of technology for recharging, reclaiming and reusing its water supplies." Valley Forward focused on a number of factors when assessing a community's ability to manage its water resources. These factors include the ability to protect water quality and serve safe and high quality drinking water; efforts to secure a future supply from a variety of sources; efforts to protect groundwater by utilizing surface water supplies; and the level of development and/or participation in recharge programs to replenish depleted aquifers. The grade also reflects evaluation of the community's drought planning, level of infrastructure financing, public education programs related to water conservation and overall innovation relating to managing water resources.



# **Future Planning**

# **Chaparral Treatment Plant**

A new state of the art water treatment plant is under construction on the corner of Hayden Road and McDonald drive. This plant will treat Scottsdale's allotment of Salt River Project water, which is now treated and delivered to our customers by the City of Phoenix.

Utilizing membranes and activated carbon filtration, the facility has been designed to provide high quality and aesthetically pleasing water to our residents south of Indian Bend Road. The plant is scheduled for completion in early 2006.

# Central Arizona Project Water Treatment Plant (CAP)

The addition of granular activated carbon adsorption treatment to the existing CAP treatment plant is in the final stages of design. The process will be the same as that installed in the Chaparral treatment plant and is intended to improve the taste, odor and overall quality of CAP water. Construction of the facility is scheduled for the fall of 2004, with completion in 2006.

# Where to Learn More About Your Drinking Water

CITY OF SCOTTSDALE WATER QUALITY STAFF 480-312-8732 480-312-0961 TDD

CITY OF SCOTTSDALE WATER OPERATIONS AND CONSERVATION (main breaks, etc.) 480-312-5650

CITY OF SCOTTSDALE WATER QUALITY WEB SITE www.scottsdaleaz.gov/water/quality

United States Environmental Protection Agency's Safe Drinking Water Hotline 800-426-4791 www.epg.gov/safewater

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY 602-771-2300 www.adeq.state.az.us/environ/water/index.html

Maricopa County Environmental Services Department 602-506-6666 www.maricopa.gov/envsvc/Wwmd.asp

TAP INTO QUALITY www.tapintoquality.com



Water Use It Wisely www.wateruseitwisely.com



Water-related topics may be discussed at City Council meetings or other public forums and we welcome your attendance. Meeting notices are posted in the "Pride" utility bill insert and are posted on the city's web site at http://eservices.scottsdaleaz.gov/cc\_planner\_p ublic

For specific water quality questions call Dan Morales (480) 312-8748.

Este informe contiene informacion muy importante sobre su agua potable. Si desea una copia de este informe en espanol o tiene alguna pregunta sobre el, por favor llame a (480) 312-5592.

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